



# So You Think You're Rational?

Recent headlines about the lottery have made me wonder why many people make the money decisions they do. So, for the first time in this publication, here is a pop quiz (don't worry – it won't be graded):

Choose between:

- a.) A sure gain of \$3,000,
- b.) An 80 percent chance of winning \$4,000 and a 20 percent chance of winning nothing.

Choose between:

- a.) A sure loss of \$3,000,
- b.) An 80 percent chance of losing \$4,000 and a 20 percent chance of losing nothing.

Choose between:

- a.) A 2 percent chance of winning \$5,000,
- b.) A 1 percent chance of winning \$10,000.

If you chose option (a) for the first question, a sure gain of \$3,000, you are in popular company. Most people do. Even though option (b) has a higher expected payout of \$3,200 ( $\$4,000 \times 80$  percent), most people are risk-averse. This explains why many people are too conservative with their money.

If you chose option (b) for the second question, an 80 percent chance of losing \$4,000, once again you are in popular company. People will do most anything to avoid a loss, even when the expected loss of \$3,200 for option (b) is \$200 more than the \$3,000 guaranteed loss of option (a). While people are generally risk-averse when making money, they are usually loss-averse when things are going down. This explains why people often sell out when stocks are going down. In addition, gains and losses are not viewed equally by most. A dollar loss is usually harder to handle than a dollar gain is to be happy about.

If you chose (b) for the third question, you have a lot of friends. This question helps explain why lotteries work so well. Our mental calculators break down, and we tend to ignore small percentages (1 percent) while focusing on big numbers (\$10,000). While the expected payouts from both are equal ( $\$5,000 \times 2$  percent =  $\$10,000 \times 1$  percent), you at least double your chances of winning something by picking option (a).

But then again, if we were all completely rational with our money, lotteries would not have the payouts they have. While pop quizzes may get graded on the curve, the real world does not. Controlling our emotions is important for our financial health. 🎲



Cameron Turner  
*Vice President*